*Supplement to the*

*"Proceedings of the Indian Academy of Sciences"*

# INDEX TO VOL. LXIX (A)

## AUTHORS' INDEX


| | |
|---|---|
| Banerjee, D. K., Sugavanam, B. and Nadamuni, G. | Synthetic investigation on testosterone and its analogues, II, 229. |
| Bhagavantam, S. and Radhakrishna, S. | Piezoelectric relaxation in crystals containing point defects, 182. |
| Bhat, P. K. .. | Magnetohydrodynamic flow between two non-conducting co-axial cylinders induced by deforming the walls of the container, 265. |
| Chandra, G. .. | *See* Lagu and others. |
| Chaudhari, K. N., Ganguli, S. N., Rao, N. K., Swami, M. S., Gurtu, A. and Singh, M. B. | The ratio of non-mesic to $\pi^-$-mesic decay of light hyperfragments, 78. |
| Desai, B. N. .. | Air-mass dynamics or subsidence processes in the Arabian Sea monsoon, 1. |
| Ganguli, S. N. .. | *See* Chaudhari and others. |
| Gurtu, A. .. | *See* Chaudhari and others. |
| Indira Chary, C. A. and Venkata Ramiah, K. | Infrared and Raman spectra and normal vibrations of N, N-dimethylthioformamide and N, N-dimethylthioacetamide, 18. |
| Jagannadham, A. V. and Venkateswarlu, Putcha | Electron paramagnetic resonance of $Mn^{2+}$ in NaF single crystals, 67. |
| | Electron paramagnetic resonance studies of $VO^{2+}$ in single crystals of NaCl, KCl and RbCl, 307. |
| Jijee, K. and Santappa, M... | Oxidation studies, VII, 117. |
| Joshi, D. G. .. | A solution of an integral equation, 36. |
| Kamal, A. A., Rao, Y. V. and Rao, Rukmini | Coherent production of pions in high energy $\pi^-$-interactions, 218. |
| Kapur, J. N. .. | Some properties of entropy of order $\alpha$ and type $\beta$, 201. |

| | | |
|---|---|---|
| Krishnamurthy, K. S. | .. | *See* Krishnamurti and Krishnamurthy. |
| Krishnamurti, D. and Krishnamurthy, K. S. | | Infrared absorption spectra of ethyl, *n*-propyl and *n*-butyl stearates, 189. |
| Kulkarni, V. G. | .. | *See* Lagu and others. |
| Lagu, R. G., Kulkarni, V. G., Thosar, B. V. and Chandra, G. | | Formation and quenching of ortho-positronium in molecular materials, 48. |
| Mande, Chintamani and Nigavekar, A. S. | | X-ray spectroscopic study of chemical bonding in NiSe and $NiSe_2$, 316. |
| Merchant, J. R. and Patell, J. R. | | Reaction of nitriles, IV, 94. |
| Nadamuni, G. | .. | *See* Banerjee and others. |
| Nagana Goud, A. and Rajagopal, S. | | Furano compounds, XIII, 129. |
| Nair, K. N. | .. | *See* Sarabhai and Nair. |
| Natarajan, L. V. | .. | *See* Santappa and Natarajan. |
| Nigavekar, A. S. | .. | *See* Mande and Nigavekar. |
| Padma, S. and Santappa, M. | | Oxidation studies, VI, 7. |
| Pant, D. D. | .. | *See* Sanwal and Pant. |
| Pantulu, P. V. and Sudarshan, E. | | Magnetic symmetry and Onsager relations, 279. |
| Patell, J. R. | .. | *See* Merchant and Patell. |
| Radhakrishna, S. | .. | *See* Bhagavantam and Radhakrishna. |
| Rajagopal, S. | .. | *See* Nagana Goud and Rajagopal. |
| Raman, C. V. | .. | Floral colours and their origins, 169. |
| Rao, K. S. R. Krishna Mohan | | *See* Subhadra Kumari and others. |
| Rao, N. K. | .. | *See* Chaudhari and others. |
| Rao, N. V. Subba | .. | *See* Subhadra Kumari and others. |
| Rao, Rukmini | .. | *See* Kamal and others. |
| Rao, Y. V. | .. | *See* Kamal and others. |
| Rastogi, R. G. | .. | Lunar tidal variations in $f_0F_2$ in the American Zone during periods of low solar activity, III, 250. |
| Santappa, M. | .. | *See* Padma and Santappa.<br>*See* Jijee and Santappa. |

| | | |
|---|---|---|
| Santappa, M. and Natarajan, L. V. | | Vinyl polymerization, VIII, 284. |
| Sanwal, D. N. and Pant, D. D. | | Electronic transitions of uranyl ion, 324. |
| Sarabhai, V. and Nair, K. N. | | Geomagnetic plasma probe for solar wind, 291. |
| Shah, G. M. | .. | Study of aerosols in the atmosphere by twilight scattering, 103. |
| Shanmuganathan, Sp. and Vanajakshi, N. | | The ionization constants of some *p*-alkylthio- and *p*-alkylsulphonyl-anilines, 212. |
| Singh, M. B. | .. | *See* Chaudhari and others. |
| Somayajulu, B. L. K. | .. | Cosmic Ray produced silicon-32 in near-coastal waters, 338. |
| Subhadra Kumari, S., Rao, K. S. R. Krishna Mohan and Rao, N. V. Subba | | Search for physiologically active compounds, XV, 88. |
| Sudarshan, E. | .. | *See* Pantulu and Sudarshan. |
| Sudarshan, E. C. G. | .. | A new formulation of relativistic quantum field theory, 133. |
| Sugavanam, B. | .. | *See* Banerjee and others. |
| Sundaram, S. and Venkatasubramanian, N. | | The chromic acid oxidation of hydroxy acids—Catalysis by manganous ions, 162. |
| Swami, M. S. | .. | *See* Chaudhari and others. |
| Thosar, B. V. | .. | *See* Lagu and others. |
| Tuli, S. K. | .. | A note on $\pi\pi$ scattering in the reaction $\pi^- p \rightarrow \pi\pi N$, 42. |
| Vanajakshi, N. | .. | *See* Shanmuganathan and Vanajakshi. |
| Venkata Ramiah, K. | .. | *See* Indira Chary and Venkata Ramiah. |
| Venkatasubramanian, N. | .. | *See* Sundaram and Venkatasubramanian. |
| Venkateswarlu, Putcha | .. | *See* Jagannadham and Venkateswarlu. |

## TITLE INDEX

Aerosols in the atmosphere, study of, by twilight scattering (Shah), 103.

Air-mass dynamics or subsidence processes in the Arabian Sea monsoon (Desai), 1.

Chromic acid oxidation of hydroxy acids—catalysis by manganous ions (Sundaram and Venkatasubramanian), 162.

Crystals containing point defects, piezoelectric relaxation in (Bhagavantam and Radhakrishna), 182.

Entropy of order $\alpha$ and type $\beta$, some properties of (Kapur), 201.

Ethyl, *n*-propyl and *n*-butyl stearates, infrared absorption spectra of (Krishnamurti and Krishnamurthy), 189.

Floral colours and their origins (Raman), 169.

Furano compounds, XIII (Nagana Goud and Rajagopal), 129.

Geomagnetic plasma probe for solar wind (Sarabhai and Nair), 291.

Integral equation, a solution of (Joshi), 36.

Light hyperfragments, the ratio of non-mesic to $\pi^-$-mesic decay of (Chaudhari and others), 78.

Lunar tidal variations in $f_0F_2$ in the American Zone during periods of low solar activity, III (Rastogi), 250.

Magnetic symmetry and Onsager relations (Pantulu and Sudarshan), 279.

Magnetohydrodynamic flow between two non-conducting co-axial cylinders induced by deforming the walls of the container (Bhat), 265.

$Mn^{2+}$ in NaF single crystals, electron paramagnetic resonance of (Jagannadham and Venkateswarlu), 67.

NiSe and $NiSe_2$, chemical bonding in, X-ray spectroscopic study of (Mande and Nigavekar), 316.

Nitriles, reaction of, IV (Merchant and Patell), 94.

N, N-dimethylthioformamide and N, N-dimethylthioacetamide, infrared and Raman spectra and normal vibrations of (Indira Chary and Venkata Ramiah), 18.

Ortho-positronium in molecular materials, formation and quenching of (Lagu and others), 48.

Oxidation studies, VI (Padma and Santappa), 7; VII (Jijee and Santappa), 117.

*p*-Alkylthio- and *p*-alkylsulphonyl-anilines, some, the ionization constants of (Shanmuganathan and Vanajakshi), 212.

Physiologically active compounds, search for, XV (Subhadra Kumari and others), 88.

Pions, coherent production of, in high energy $\pi^-$-interactions (Kamal and others), 218.

$\pi\pi$ scattering in the reaction $\pi^- p \to \pi\pi N$, a note on (Tuli), 42.

Relativistic quantum field theory, a new formulation of (Sudarshan), 133.

Silicon-32 in near-coastal waters, cosmic ray produced (Somayajulu), 338.

Testosterone and its analogues, synthetic investigation on (Banerjee and others), 229.

Uranyl ion, electronic transitions of (Sanwal and Pant), 324.

Vinyl polymerization, VIII (Santappa and Natarajan), 284.

$VO^{2+}$ in single crystals of NaCl, KCl and RbCl, electron paramagnetic resonance studies of (Jagannadham and Venkateswarlu), 307.